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ABSTRACT OF THE DISCLOSURE

There is provided a cell search apparatus and method in a mobile communication system. The cell search apparatus is slot time-synchronized by receiving a first synchronization code in each slot of a P-SCH frame and in addition receives over the slots of an S-SCH frame a base station group specific code representing one of base station groups and a base station specific code representing one of base stations in the base station group. In the cell search apparatus, a base station group specific code detecting unit detects the base station group specific code received on the S-SCH in the slot-synchronized state, and a base station specific code detecting unit detects a transmitting base station by detecting the base station specific code received following the base station group specific code.